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October 28, 2002

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Via Hand Delivery
Ms. Marlene H. Dortch
Secretary
Federal Communications Commission
445 12th Street, S.W.
Washington, D.C. 20554

Re: ***Ex Parte* Presentation**
IB Docket No. 01-185, ***Flexibility for Delivery of Communications by Mobile Satellite Service Providers in the 2 GHz Band, the L-Band, and the 1.6/2.4 GHz band;***
File *No.* **SAT-ASG-20010302-00017 et al.,** ***Application of Mobile Satellite Ventures Subsidiary LLC to Launch and Operate a Next-Generation Satellite System***

Dear Ms. Dortch:

Mobile Satellite Ventures Subsidiary LLC ("MSV") hereby files an original and four (4) copies of the attached paper entitled "Analysis of Out-of-Channel Emission Levels of MSV's Base Stations Relative to Safety and Rescue (SAR) Receivers" for inclusion in the record of the above-captioned proceedings.

Very truly yours,

David S. Konczal

cc: Paul Locke

0+4

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ANALYSIS OF OUT-OF-CHANNEL EMISSION LEVELS OF MSV's BASE STATIONS RELATIVE TO SAFETY AND RESCUE (SAR) RECEIVERS

October 25, 2002

10802 Parkridge Boulevard
Reston, Virginia 20191
USA

Based on the inputs that MSV has received from Ericsson, the Out-of-Channel Emissions (OOCE) level of MSV's ancillary terrestrial base stations (relative to the in-channel carrier level) is expected to **be** less than, or equal to, -61 dBc/MHz, per carrier. The table below illustrates that as long as a Search and Rescue **(SAR)** receiver site is at least 5 km away from a MSV base station, the interference produced by that base station will be below the maximum allowed level, satisfying $I/N \leq -9$ dB. The analysis takes into account the antenna down-tilt configuration of the base station (10 dB EIRP reduction in the direction of the horizon relative to antenna bore-sight) and assumes Walfisch-Ikegami line-of-sight propagation.

We understand that there are relatively few **SAR** receive sites that are likely to be within several kilometers of MSV's base stations. Based on this analysis, we would expect to be able to coordinate the operation of those base stations using one or more of the following approaches:

1) Judicious antenna pointing to further reduce the EIRP that is launched in the direction of the **SAR** receiver.

2) Inclusion of a notch filter in the transmitter of a base station to further reduce the OOCE in the **SAR** band.

Parameter	Units	Value
SAR LEO LUT:		
G/T=	dB	4
Gr =	dBi	27
LUT Noise Temperature T =	dBK	23
Boltzman's Constant k=	dBW/Hz-K	-228.6
kT= No =	dBW/Hz	-205.6
Maximum Allowable Interference to Noise Ratio I/N =	dB	-9
Max Io at LUT receiver =	dBW/Hz	-214.6
MSV BTS:		
BTS Peak EIRP =	dBW	19.1
BTS Peak EIRP toward Horizon	dBW	9.1
Voice Activity Factor & Closed Loop Power Control	dB	-10
Carriers per Base Station Sector		3
Effective EIRP	dBW	3.9
Out-of-Channel Emissions =	dBc/MHz	-61
Out-of-Channel Emissions Density Io=	dBW/Hz	-117.1
Net Isolation Required =	dB	124.5
Frequency =	MHz	1545
Walfisch-Ikegami Line-of-sight (LOS) Distance =	km	5.0